

Attorney Docket No.: 050623.00211

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of the claims in the application:

Listing of Claims:

1. (Currently Amended) A coating for an implantable medical device, the coating comprising a first region comprising having a polymer and a drug incorporated therein and a second region disposed over the first region,

wherein the second region comprises a polymer and a material having a melting temperature within the range between about 32 °C and 40 °C for modifying the rate of release of the drug, the polymer in the second region having in a dry state a glass transition temperature within a range of between about 35°C and about 50°C,

wherein the polymer in the second region in the dry state contains less than about 1 mass % of water, and

wherein when the body temperature of a patient in which the device comprising the coating is implanted rises to a temperature above the patient's normal body temperature, the morphology of the coating changes so as to change the release rate of the drug in the coating.
2. (Original) The coating of Claim 1, wherein the implantable medical device is a stent.
3. (Original) The coating of Claim 1, wherein the drug is an anti-inflammatory drug.
4. (Currently Amended) The coating of Claim 1, wherein the polymer in the second region, the polymer in the first region, or both polymers in the first and the second regions ~~comprises~~ comprise an acrylic polymer, a non-acrylic polymer, or blends thereof.
5. (Cancelled)

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6. (Currently Amended) The coating of Claim 4, wherein the non-acrylic polymer is selected from a group consisting of [[,]] poly(2-cyclohexylethylethylene), atactic poly(*iso*-propylethylene), poly(1,1,2-trimethylethylene), poly(4,4 dimethylpentylethylene), poly(2,2,2-trifluoroethoxytrifluoroethylene), poly(4-methoxybenzoylethylene), poly(3,4-dimethoxybenzoylethylene), poly(vinyl fluoride), poly(cyclopentanoyloxyethylene), 60% syndiotactic poly(formyloxyethylene), poly[4-(*sec*-butoxymethyl) styrene], poly(4-butoxystyrene), and blends thereof.

7. (Cancelled)

8. (Currently Amended) The coating of Claim 1, wherein the polymer in the second region has a ~~the~~ melting temperature above about 50 °C.

9. (Currently Amended) A topcoat for an implantable medical device, comprising a first phase comprising a ~~first~~ polymer, and a second phase comprising a material immiscible with the polymer, the material having a melting temperature within the range between about 32 °C and 40 °C,

wherein when the body temperature of a patient in which the device comprising the topcoat is implanted rises to a temperature above the patient's normal body temperature, the morphology of the topcoat changes so as to change the release rate of a drug in a coating under the topcoat.

10. (Previously Presented) The topcoat of Claim 9, wherein the implantable medical device is a stent.

11. (Previously Presented) The topcoat of Claim 9, wherein the material has a melting temperature of about 37 °C.

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12. (Previously Presented) The topcoat of Claim 9, wherein the polymer comprises an acrylic polymer, a non-acrylic polymer, or blends thereof.

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) The topcoat of Claim 12, wherein the non-acrylic polymer is selected from a group consisting of [[.]] poly(2-cyclohexylethylethylene), atactic poly(*iso*-propylethylene), poly(1,1,2-trimethylethylene), poly(4,4 dimethylpentylethylene), poly(2,2,2-trifluoroethoxytrifluorooctylene), poly(4-methoxybenzoylethylene), poly(3,4-dimethoxybenzoylethylene), poly(vinyl fluoride), poly(cyclopentanoyloxyethylene), 60% syndiotactic poly(formyloxyethylene), poly[4-(*sec*-butoxymethyl) styrene], poly(4-butoxystyrene), and blends thereof.

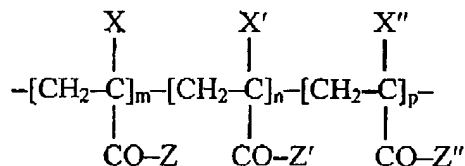
16. (Previously Presented) The topcoat of Claim 9, wherein the drug is an anti-inflammatory drug.

17. – 24. (Cancelled)

25. (New) The coating of Claim 4, wherein the acrylic polymers are selected from a group consisting of poly(*tert*-butyl acrylate), poly[3-chloro-2,2-*bis*(chloromethyl) propyl acrylate], poly(cyanobenzyl acrylate), poly(2-methoxycarbonylphenyl acrylate), poly(3-methoxycarbonylphenyl acrylate), poly(4-ethoxycarbonylphenyl acrylate), poly(hexadecyl acrylate), poly(3-dimethylaminophenyl acrylate), poly(*p*-tolyl acrylate), poly(*n*-butyl acrylamide), poly(*iso*-decyl acrylamide), poly(octafluoropentyl methacrylate), poly(3,3-dimethylbutyl methacrylate), isotactic poly(methyl methacrylate), poly(*n*-propyl methacrylate), isotactic poly(ethyl chloroacrylate), poly(ethyl fluoromethacrylate), and blends thereof.

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26. (New) The coating of Claim 4, wherein the acrylic polymers are of the formula



wherein:

X, X', and X'' is each, independently, a hydrogen atom or an alkyl group, such as methyl group;

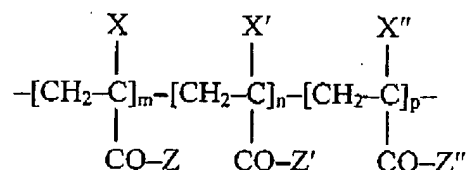
Z, Z', and Z'' is each, independently, a substituted or unsubstituted amino group or an alkoxy group OR, OR', and OR'', where R, R' and R'' is each, independently, a C₁ to C₁₂ straight chained or branched aliphatic radical; and

each of m, n, and p is an integer, where m > 0, n ≥ 0, and p ≥ 0.

27. (New) The coating of Claim 12, wherein the acrylic polymers are selected from a group consisting of poly(*tert*-butyl acrylate), poly[3-chloro-2,2-*bis*(chloromethyl) propyl acrylate], poly(cyanobenzyl acrylate), poly(2-methoxycarbonylphenyl acrylate), poly(3-methoxycarbonylphenyl acrylate), poly(4-ethoxycarbonylphenyl acrylate), poly(hexadecyl acrylate), poly(3-dimethylaminophenyl acrylate), poly(*p*-tolyl acrylate), poly(*n*-butyl acrylamide), poly(*iso*-decyl acrylamide), poly(octafluoropentyl methacrylate), poly(3,3-dimethylbutyl methacrylate), isotactic poly(methyl methacrylate), poly(*n*-propyl methacrylate), isotactic poly(ethyl chloroacrylate), poly(ethyl fluoromethacrylate), and blends thereof.

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28. (New) The coating of Claim 12, wherein the acrylic polymers are of the formula



wherein:

X, X', and X'' is each, independently, a hydrogen atom or an alkyl group, such as methyl group;

Z, Z', and Z'' is each, independently, a substituted or unsubstituted amino group or an alkoxy group OR, OR', and OR'', where R, R' and R'' is each, independently, a C₁ to C₁₂ straight chained or branched aliphatic radical; and

each of m, n, and p is an integer, where m > 0, n ≥ 0, and p ≥ 0.

29. (New) The coating of Claim 1, wherein the material is selected from 1-tetradecanol, Vegetable wax, Cocoa butter, and Triglyceride (stearin-dipalmityl).

30. (New) The topcoat of Claim 9, wherein the material is selected from 1-tetradecanol, Vegetable wax, Cocoa butter, and Triglyceride (stearin-dipalmityl).